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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number 10/686,828

Filing Date Oct. 15, 2003

First Named Inventor Eric S. Olson

Art Unit

Examiner Name

Attorney Docket Number TCOM0010

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
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### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name			
Signature			
Printed name	Steven J Shattil		
Date	03/04/2005	Reg. No.	40,170

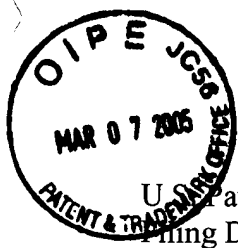
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Typed or printed name	Steven J Shattil	Date	03/04/2005

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Internal Docket No.: TCOM0010

U.S. Patent Application No.: 10/686,828  
Filing Date: October 15, 2003  
First Named Inventor: Eric S. Olson  
Title: "Method and Apparatus for  
Interference Suppression with Efficient  
Matrix Inversion in a DS-CDMA System"

Date: March 4, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

### Information Disclosure Statement

Pursuant to 37 C.F.R. §1.56, 1.97, and 1.98, this Information Disclosure Statement is submitted in the above-identified patent application. A listing of documents to be published on the face of any patent granted from this application is submitted herewith on Form PTO-1449. Any other documents or information submitted for consideration by the Examiner are listed in this paper. A copy of each foreign patent and publication, or portion thereof listed or herein identified, is submitted herewith, except that a copy of any U.S. patent application identified herein or any patent publication or other information listed herein cited or submitted in a prior application relied upon for an earlier filing date under 35 U.S.C. §120 and identified below, is not submitted.

### Certification

This Information Disclosure Statement is submitted prior to the mailing date of the first Office Action on the merits received by Applicant in the above-identified application.

March 4, 2005  
Date

  
Steven J. Shattil

Respectfully submitted,

Steven J Shattil  
USPTO Reg. No. 40,170  
TensorComm, Inc.  
1490 W. 121st Avenue, Suite 202  
Westminster, CO 80234  
Phone: 303-327-4069 ext. #8  
Fax: 303-920-4796  
sshattil@tensorcomm.com



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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 12

**Complete if Known**

Application Number	10/686,828
Filing Date	Oct. 15, 2003
First Named Inventor	Eric S. Olson
Art Unit	
Examiner Name	
Attorney Docket Number	TCOM-0010

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 4088955	05-09-1978	Baghdady	
		US- 4309769	01-05-1982	Taylor, Jr.	
		US- 4359738	11-16-1982	Lewis	
		US- 4665401	05-12-1987	Garrard et al.	
		US- 4670885	06-02-1987	Parl et al.	
		US- 4780885	10-25-1988	Paul et al.	
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		US- 4893316	01-09-1990	Janc et al.	
		US- 4922506	05-01-1990	McCallister et al.	
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		US- 4965732	10-23-1990	Roy III et al.	
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		US- 5099493	05-24-1992	Zeger et al.	
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		US- 5109390	04-28-1992	Gilhausen et al.	
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		US- 5136296	04-04-1992	Roettger et al.	
		US- 5151919	09-29-1992	Dent	

**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		EP 0558910 A1	01-25-1993	Blaupunkt-Werke GmbH		435973
		EP 0610989 A2	01-31-1994	Phillips Patentverwaltung GmbH		435973
		JP2000-13360A	01-14-2000	NEC Corp.		435973
		DE 4201439 A1	07-22-1993	Daimler-Benz		435972
		DE 4326843 A1	02-16-1995	Richard Hirschmann GmbH & Co		435972

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Sheet 2

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Application Number	10/686,828
Filing Date	Oct. 15, 2003
First Named Inventor	Eric S. Olson
Art Unit	
Examiner Name	
Attorney Docket Number	TCOM-0010

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		US- 5218359	06-08-1993	Minamisono	
		US- 5218619	06-08-1993	Dent	
		US- 5220687	06-05-1993	Ichikawa et al.	
		US- 5224122	06-29-1993	Bruckert	
		US- 5237586	08-17-1993	Bottomley	
		US- 5263191	11-16-1993	Dickerson	
		US- 5280472	01-18-1994	Gilhousen et al.	
		US- 5305349	04-19-1994	Dent	
		US- 5325394	06-28-1994	Bruckert	
		US- 5343493	08-30-1994	Karimullah	
		US- 5343496	08-30-1994	Honig et al.	
		US- 5347535	09-13-1994	Karasawa et al.	
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		US- 5386202	01-31-1995	Cochran et al.	
		US- 5390207	02-14-1995	Fenton et al.	
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		US- 5437055	07-25-1995	Wheatley III	

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		DE 4343959 A1	06-29-1995	Richard Hirschmann GmbH & Co		522068
		WO 93/12590	06-24-1995	Array-Comm, Inc.		522068
		GB 2280575 A	02-01-1995	Roke Manor Research Limited		522068
						522068
						522068

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		US- 5440265	08-08-1995	Cochran et al.	
		US- 5448600	09-05-1995	Lucas	
		US- 5481570	01-02-1996	Winters	
		US- 5506865	04-09-1996	Weaver Jr.	
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		US- 5602833	02-11-1997	Zehavi	
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		US- 5859613	01-12-1999	Otto	
		US- 5872540	02-16-1999	Casabona	
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		US- 5953369	09-14-1999	Suzuki	

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						548157
						548157
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		US- 5995499	11-30-1999	Hottinen et al.	
		US- 6002727	12-14-1999	Uesugi	
		US- 6014373	01-11-2000	Schilling et al.	
		US- 6018317	01-25-2000	Dogan et al.	
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		US- 6131013	10-10-2000	Bergstrom et al.	
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		US- 6141332	10-31-2000	Lavaen	
		US- 6154443	11-28-2000	Huang et al.	
		US- 6157685	12-05-2000	Tanaka et al.	
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		US- 6163696	12-19-2000	Bi et al.	
		US- 6166690	12-26-2000	Lin et al.	

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		US- 6172969	01-09-2001	Kawakami et al.	
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		US- 6192067	02-20-2001	Toda et al.	
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		US- 6215812	04-10-2001	Young et al.	
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		US- 6230180	05-08-2001	Mohamed	
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		US- 6259688	07-10-2001	Schilling et al.	
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		US- 6275186	08-14-2001	Kong	
		US- 6278726	08-21-2001	Mesecher et al.	
		US- 6282231	08-21-2001	Norman et al.	

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Substitute for form 1449A/PTO  <h2 style="text-align: center; margin: 0;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center; margin: 10px 0;">(Use as many sheets as necessary)</p>		<h3 style="text-align: center; margin: 0;">Complete if Known</h3> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/686,828</td> </tr> <tr> <td>Filing Date</td> <td>Oct. 15, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Eric S. Olson</td> </tr> <tr> <td>Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>TCOM-0010</td> </tr> </table>		Application Number	10/686,828	Filing Date	Oct. 15, 2003	First Named Inventor	Eric S. Olson	Art Unit		Examiner Name		Attorney Docket Number	TCOM-0010
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Art Unit															
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Attorney Docket Number	TCOM-0010														
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U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		US- 6282233	08-28-2001	Yoshida	
		US- 6285316	09-04-2001	Nir et al.	
		US- 6285319	09-04-2001	Rose	
		US- 6301289	10-09-2001	Bejjani et al.	
		US- 6304618	10-16-2001	Hafeez et al.	
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		US- 6317453	11-13-2001	Chang	
		US- 6321090	11-20-2001	Soliman	
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		US- 6327471	12-04-2001	Song	
		US- 6330460	12-11-2001	Wong et al.	
		US- 6333947	12-25-2005	van Heeswyk et al.	
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		US- 6351642	02-26-2002	Corbett et al.	
		US- 6359874	03-19-2002	Dent	
		US- 6362760	03-26-2002	Kober et al.	
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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
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**Complete if Known**

Application Number	10/686,828
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First Named Inventor	Eric S. Olson
Art Unit	
Examiner Name	
Attorney Docket Number	TCOM-0010

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		US- 6380879	04-30-2002	Kober et al.	
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Examiner Name	
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		First Named Inventor	Eric S. Olson
		Art Unit	
		Examiner Name	
Sheet 10 of 12	Attorney Docket Number	TCOM-0010	

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		VERDU, Minimum Probability of Error for Asynchronous Gaussian Multiple-Access Channels, IEEE Transactions on Information Theory, Jan. 1986, Vol. IT-32, No. 1	

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First Named Inventor

Eric S. Olson

Art Unit

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